

Sub Jan 27, 2017

Work Order ID 154721

154721

Page 1

Monday, December 19, 2016 4:51:00 PM

Item ID: D4635-144 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Aft Ceiling Replacement Panel Assembly, RH
 Start Date: 1/10/2017 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 1/16/2017 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: ^{DAS}21 ₉₋₈₉ Date: DEC 20 2016 Tooling: Date: Run Start *NR1*
 QC: Date: SPC (Y/N): Date: Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4635	F								
100		0.00							
100									
HandThermo	Memo	0.14							
Hand Finishing Thermoforming	Pick Kit								

^{DAS}6 ₉₋₈₉ JAN 12 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					

Root Cause		FAULT CATEGORY					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER :							

Work Order ID 154721***154721***

Page 2

Monday, December 19, 2016 4:51:00 PM

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Start Date: 1/10/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 1/16/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110		0.00				DAS 27 9-89			
110 Small Fab	Memo Assemble as per Dwg D4635-144 Bond foam core to inside of panel 3M Scotch Weld 1300 Batch: <u>m135557</u> 1- Scuff bonding surface to eliminate in-perfections and increase bonding and clean with wash& wipe 2- Locate and glue down Channel Assy, angles, brackets, and mounting pads using 3M Plastic welder II.(see note 8) Batch # <u>135436</u> Expiry Date <u>Feb 2017</u> 3- Apply labels as per Dwg. and seal with 3M 3950 edge sealer(see note 9) Batch: <u>135435</u>	0.17							
120	QC5- Inspect part completeness to step on W/O	0.00							
120 QC Quality Control	Memo	0.00							DAS 9 9-89 <u>① 17.0419</u>

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :						
Misidentified	☐	Past Due	☐							

154721

Monday, December 19, 2016 4:51:00 PM

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Start Date: 1/10/2017 **Start Qty:** 1.00 ***1***

Required Date: 1/16/2017 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Run Start *NR1*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop ***NR2***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
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Misidentified ☐	Past Due ☐																																																														

Picklist Print

Monday, December 19, 2016 4:51:05 PM

Page 1

Work Order ID: 154721

154721

Parent Item: D4635-144

D4635-144

Parent Item Name: Aft Ceiling Replacement Panel Assembly, RH

Start Date: 1/10/2017

Required Date: 1/16/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev. A 12/08/09 New Issue DL
12/11/08 Doc Release DL
Update 13/07/09 DL ver: DD
13/12/09 DL
Ipp Rev. E Dwg Update 14/01/09 DL
Dwg. Update 15/01/27 DL

IPP Rev B
IPP Rev. C Dwg.
IPP Rev D Dwg Update
IPP Rev. F

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4635-4 *D4635-4* Aft Ceiling Panel, RH		Manufactured	No			100	Each	0.0000	1	1			DAS 27 9-89
D4669-1 *D4669-1* Bracket		Manufactured	No			100	Each	20.0000	1	1			
				<u>Location</u>				<u>Loc Qty</u>					
				MF004				20					
				125017				20					
D4695-4 *D4695-4* Channel		Manufactured	No			100	Each	5.0000	1	1			
				<u>Location</u>				<u>Loc Qty</u>					
				ST446				5					
				126498				3					
				149166				2					
D4732-11 *D4732-11* Label		Manufactured	No			100	Each	11.0000	1	1			
				<u>Location</u>				<u>Loc Qty</u>					
				MF005				11					
				120066				2					
				123205				9					

BISYDB

JAN 12 2017

DAS
6
9-89

JAN 12 2017

DAS
6
9-89

JAN 12 2017

AS
6
99

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By 	
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Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
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Picklist Print

Monday, December 19, 2016 4:51:05 PM

Work Order ID: 154721

154721

Parent Item: D4635-144

D4635-144

Parent Item Name: Aft Ceiling Replacement Panel Assembly, RH

Start Date: 1/10/2017

Required Date: 1/16/2017

Start Qty: 1.00

Required Qty: 1.00

D4732-39 Manufactured No

100 Each 10.0000 1 1

D4732-39

Label

**

JAN 12 2017

DAS
6
9-89

Location

Loc Qty

Loc Code

MF005

10

123219

10

D4732-41 Manufactured No

100 Each 10.0000 1 1

D4732-41

Label

**

JAN 12 2017

DAS
6
9-89

Location

Loc Qty

Loc Code

MF005

10

123220

10

D5022-5 Manufactured No

100 Each 6.0000 1 1

D5022-5

Foam, Side Panel, Aft

**

JAN 12 2017

DAS
6
9-89

Location

Loc Qty

Loc Code

MF010

6

123920

2

126186

4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

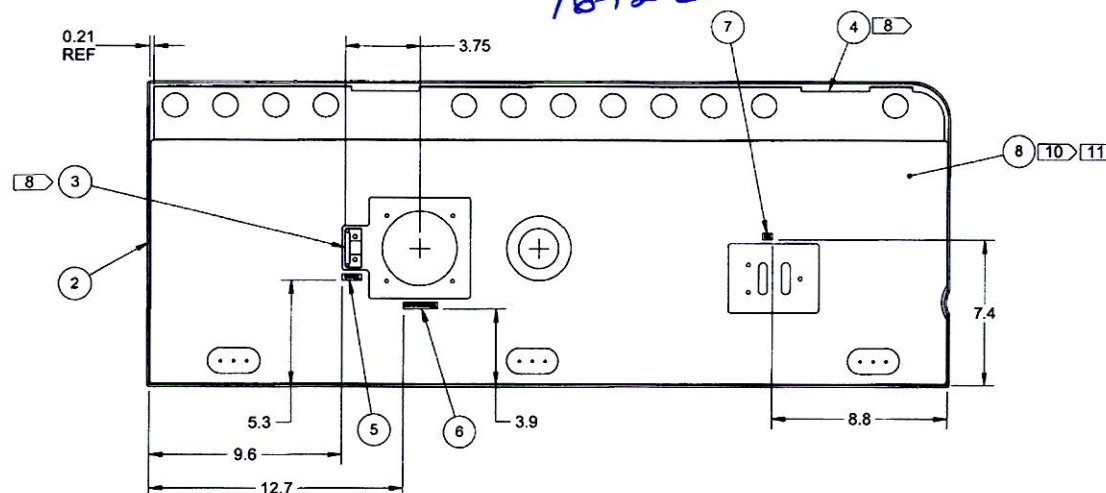
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																		
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		OTHER : _____																							

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 154721 MJS
1612-20

ITEM	QTY	P/N	DESCRIPTION
1	X	D4635-144	RH, AFT CEILING REPLACEMENT PANEL ASSY
2	1	D4635-4	RH, AFT CEILING PANEL
3	1	D4669-1	BRACKET
4	1	D4695-4	CHANNEL
9	1	D4732-11	LABEL
9	1	D4732-39	LABEL
9	1	D4732-41	LABEL
8	1	D5022-5	FOAM, SIDE PANEL, AFT, RH



D4635-144 RH, AFT CEILING REPLACEMENT PANEL ASSY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) APPLY A BEAD (0.20 TO 0.30 WIDE) OF DEVCON PLASTIC WELDER II (0.25 INSIDE OF BOTH EDGES OF PART) TO BOND D4669-1, D4695-4. WAIT FOR 2 TO 4 HOURS FOR FUNCTIONAL CURE
- 9) LOCATE LABELS AS SHOWN, SEAL LABELS USING 3950 EDGE SEALER OVER LABEL TOP SURFACE
- 10) APPLY AN EVEN COAT OF 3M SCOTCH WELD 1300L CONTACT ADHESIVE TO BOND D5022-5 FOAM CORE TO INSIDE OF PANEL
- 11) CENTER D5022-5 FOAM ON D4635-4

RELEASED

2015 JAN 26

APPROVED	DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	RF		
	CHECKED	AK	DRAWING NO. D4635	REV. F
	MFG. APPR.	DL	SHEET 12 OF 18	
	APPROVED	HS	TITLE	
	DE APPR.	DS	OUTBOARD CEILING PANELS	
DATE		14.11.28	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	